demand-siders, revolve around how to rearrange the economic system so that we can be reasonably well off without continual exponential economic growth.

At any rate, new theories eventually supersede the old. Creative and innovative ideas, combined with specific policies to deal with changing economic conditions, are continually needed. Hence, we will always be looking for economic philosophers like Adam Smith or John Maynard Keynes—this time, however, for one who can match wits with our own troubled times.

Questions for Thought and Discussion

1. What are some solutions for "stagflation"?
2. What is a "peace dividend"? If the nation had a peace dividend of $100 billion dollars, how, in your opinion, should we use it? List priorities and defend your list.
3. Why did the classical economists cling so defiantly to their theory?
4. How can we say that output equals employment when they are not expressed in the same units of measure?
5. In the 1960s it was not uncommon to hear the opinion: "We need a war to maintain our prosperity." Evaluate this statement in terms of your knowledge of fiscal policy and recent economic history.

9

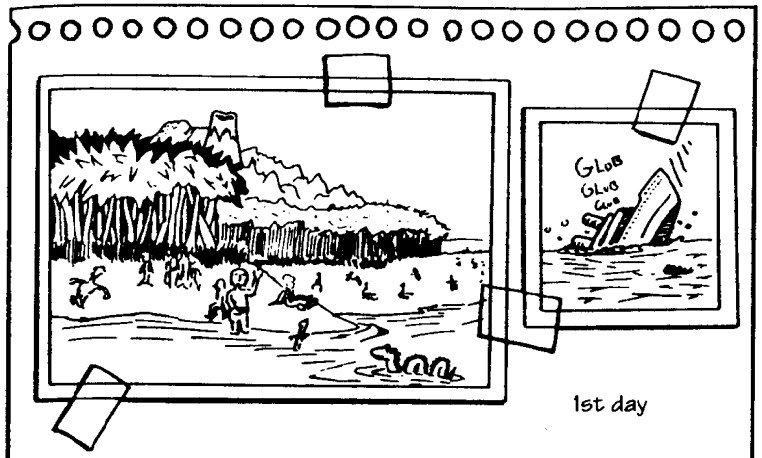
Money

Imagine that you and 50 friends, acquaintances, and relatives are all shipwrecked on a large, lovely island in the middle of the South Pacific. At first, it is an idyllic life as everyone lounges on the sunny beach waiting for the rescue ship to sail into view, but after a few days you begin to realize the seriousness of your predicament. With grim faces, everyone gathers on the beach to map out some kind of survival plan.

A governing body is elected, and soon the necessary tasks are taken up by different individuals. Since Joe Jones is a carpenter, he volunteers to build thatched huts for everyone. Smith and Baker are assigned to make fishing boats and nets. Chester Olson will gather wild foods for the community larder.

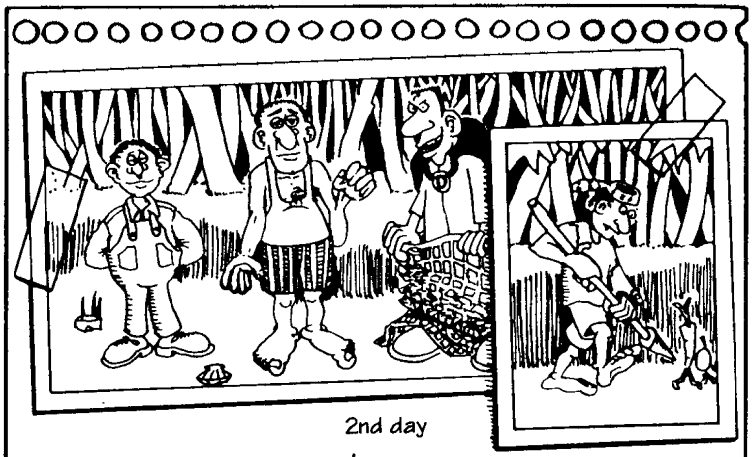
Time passes. The island economy becomes more specialized and complex. Before too long, major problems arise as people experience bottlenecks in their transactions. They become frustrated when they attempt to get their thatched roofs mended or to obtain food for the evening meal. What's wrong?

The problem is that our little economy has become so complex that some kind of monetary system is needed. The islanders are currently using the **barter system,** freely exchanging goods and services when they are needed. This works fine on a limited scale, but when a few more jobs are assigned to



1st day

Dear Journal:
There are 50 of us now stranded on this island due to our shipwreck. Weather's sunny and rescue boat is due soon. Found a polaroid camera.



2nd day

We elected a governing body today and assigned tasks to everyone. Joe will be building huts, Smith & Baker will be making fishing boats & nets, and Chester will be hunting for wild foods.

a few more people, the community begins to encounter some major problems.

As an example, suppose that your specific skill is mending clothing. One day you decide you would like some of Chester's wild foods, and you propose to trade your services for part of Chester's stores. Unfortunately, Chester tells you he doesn't need any of his clothing mended, so what do you do? In a moneyless economy, you must find a third party who not only needs clothing mended but also has a service that Chester wants. If you can't find that third person, you will be temporarily out of luck. Trying to track down all the people that you need to make all the exchanges you require would be time-consuming and exhausting. And, in the long run, you still might not locate the necessary people to make your final exchange.

Everyone on the island is becoming more and more convinced of the need to develop some kind of monetary system to make it easier to exchange goods and services. When **money** is effectively doing its job, it functions as a universally accepted *medium of exchange*. It also acts as a *standard of value*. As such, a **money supply** has a single monetary unit (for example, a dollar) that is a common denominator for all economic goods and services. (It's really amazing, for example, that we can use the same unit of currency to compare a dollar's worth of hamburger with a billion-dollar space telescope.) Finally, money can be used as a *store of value*. It can be saved or spent, hoarded or invested. It's a marvelous tool, and, without a doubt, one of our most useful inventions.

The islanders elect a banker (John Jacob Harrison III) and give him the responsibility of devising a monetary system for the island. Since John has never thought much about the characteristics of money, he forms a banking committee to discuss the issue. "First, let's list the different attributes that our new money system should have," John says, as the committee sits down for a meeting. Baker makes the first point: "Whatever we use for money must be fairly *durable* and something that can be *easily transferred* from person to person." Everyone nods in agreement.

After a moment's silence, Joe Jones suddenly says, "There must be a basic unit (like the dollar) that can be *divided* into smaller units as well as *multiplied* into larger units, right?" The group feels that although this is a sound point in theory, it is

impractical on the island, where supplies of suitable materials for money are limited.

Chester, sitting off by himself, is thinking very hard about something. He suddenly stands up and says, "Hold on, hold on. The most important thing about money is its *limited supply*—too much of the stuff will make it worthless." Everyone is impressed by Chester's insight. John (the banker) says, "You're absolutely right, Chester, but you haven't gone far enough." There is a hushed silence as John formulates his thoughts and then continues: "Yes, our money supply must be limited, but we must also be able to *expand the amount of money in the economy as the economy itself expands.* We have a problem here," the island banker continues, "because whatever we use for money must be easy for us (the authorized bankers) to duplicate but very difficult or impossible for any unauthorized person to counterfeit. Therefore, we need to be very careful in our choice of what to use as money."

Baker thinks that we could use buttons as monetary units. "The banking committee would need authorization to remove all the buttons from the islanders' clothing . . ."—but before Baker can say another word, he is told to sit down and think of something else. Someone else suggests shoelaces, pointing out that the laces could be cut up into different denominations. Other suggestions include everything from braided hair to pieces of paper signed by the banking committee. It might be worth our while to pause here, leave the island for a moment, and delve a little deeper into the actual history of money. Where did it get its first foothold? And how did it evolve into the monetary systems of today? Let's take a closer look.

The Origins of Money

No one knows for sure, but it's quite likely that the earliest medium of exchange was what economists call **commodity money**—money that has intrinsic worth in the form of some kind of valuable commodity. Some archaeologists suggest that the first commodity money may have been grain, which humans began to cultivate in small farming communities approximately 10,000 years ago. Such a scenario implies that some sort of standardized "measure of grain" became the commonly accepted

"standard of value." We do know that roughly 4000 years ago, the Babylonian Code of Hammurabi specified that unskilled workers were to be paid in grain, and archaeological research has revealed that grain banking was prevalent in ancient Egypt. Commodity money is also implied in our common financial term "pecuniary" (meaning "of or involving money"), which was derived from the Latin word *pecus* and originally referred to a "head of cattle."

The first coins came into use in Greece somewhere between 700 and 1000 B.C. The advantage of using coins was that their weight or volume did not have to constantly be measured out, as grain did; a coin could therefore be accepted "on sight." This characteristic undoubtedly added to the efficiency of doing business in a money economy, and thus coins became the currency of choice in the early Greek and Roman worlds. These coins were made of metal, but other cultures and communities used different forms of standardized monetary objects made out of bone, shells, baked clay, and similar materials.

Henry Lindgren, whose interest lies in the psychology of money, informs us that the Greeks first stamped their coins with the faces of their gods. It didn't take too long, however, for Greek political leaders to spread a little propaganda by changing the faces of the gods to appear more and more like their own:

> Once Alexander was dead, all doubt about his divinity vanished. Coins bearing the head of Hercules continued to be issued in Alexander's name by local mints, but Hercules now distinctly resembled Alexander. As far as the man in the street was concerned, the face *was* that of the deified Alexander. These coins, which circulated throughout the ancient world for hundreds of years, gave visible support to the Alexander legend.[33]

Thus, not only did money help to expand trade and commerce, but it also helped to bind large and disparate communities together and to legitimize political leadership. In addition, historians have suggested that the sciences and arts of this highly civilized Greek and Roman period were, in part, byproducts of expanded money and trade and the concurrent improvement in the standard of living.

The first coins were probably commodity money consisting of gold or silver (or, in the case of the early Greek "Dumps,"—bean-shaped lumps—that were amalgams of precious metals). With the expansion of trade and the inherent limitations of

mining sufficient quantities of gold and silver, the Greeks and others eventually turned to what we call **fiat money**—money that is *declared by the government to have value.* Such coinage becomes mere **token money,** since its metal content (usually bronze and copper) is decidedly less than the face value of the coin. Paper currency (such as our own dollars) would also be, by definition, fiat money. The Chinese are believed to have used the first paper money, which (as reported by Marco Polo) was made out of the bark of the mulberry tree.*

Returning once more to our desert island example, the banking committee now must consider whether to go with commodity money (shoelaces, buttons, etc.) or fiat money made up and issued by the committee itself. They finally decide, with great solemnity, to issue signed pieces of paper as their official money supply.

The last problem the islanders must face is how they are going to make the new currency valuable. What, in fact, makes *any* currency valuable? Shifting from our desert island to the U.S. economy, we might ask, "What makes our own dollar valuable?"

The U.S. Dollar

Many people are under the misconception that the government "backs up" the value of every dollar with a precious commodity metal, such as gold or silver. They may be surprised to discover that the last vestige of gold backing (25 cents on the dollar) was removed by Congress in 1967. Thus, the $1 or $5 bill in your pocket or wallet is unbacked fiat money.

If you check the front of a $1 bill (or any U.S. paper currency), you will see to the upper left the declaration "THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE." This printed statement does not, however, guarantee the inherent value and spending potential of the bill. Other currencies with similar declarations have hyperinflated to the point of uselessness, grossly eroding the public's faith and purchasing power. No,

*I am indebted to Professor Henry Lindgren for the details in this discussion of monetary history. [See Lindgren's *Great Expectations* (Los Altos, CA: William Kaufmann, 1980).]

what makes our dollars valuable is really a matter of *social trust.* Money is valuable because we have faith that *each one of us will accept it as a legitimate medium of exchange.* If all of a sudden everyone thought that money had no value, then indeed it would have no value.

Fortunately, there is no reason for people to abandon faith in their dollars—unless, of course, the government doesn't do its job. If, for example, the government issued *too much* money, then money would become too plentiful, and there would be a relative shortage of things to buy. We would then experience inflation. Under extreme conditions of hyperinflation, the public could lose faith in government currency and return to bartering or develop black-market currencies.

On the other hand, if there is *not enough* money to go around, normal economic transactions would be stifled, which can also be dangerous for the economy. Just the right balance between output and money must be achieved for our dollars to remain valuable.

There was a time, however, when our citizens did not accept the legitimacy of the federal currency. The man who became our first President spoke with great fervor on this subject:

> George Washington . . . denounced those who refused to accept at full value the bills of the Continental Congress as "pests to society and the greatest enemies we have to the happiness of America. I would to God that some one of the more atrocious in each state was hung in gibbets upon a gallows five times as high as the one prepared by Haman.[34]

People do not put their faith and trust in a monetary system automatically; the public's faith and trust must be earned by careful monetary regulation and controls. How then is the U.S. money supply controlled? This is a good question, but one that most Americans probably would not answer correctly.

It is generally thought that our money supply is controlled simply by turning the printing presses on and off. If we want more money, the government just prints it up. This notion is only partly true, since our money supply (our assets that can be *spent immediately*) is more than just *currency* (bills and coins); it is also in the form of **demand deposits,** or checking accounts. Today, in fact, there is considerably more money in demand deposits than in total currency. Thus, to control the money supply,

we must be able to regulate these demand-deposit dollars as well as the paper currency. How is this done?

Think of the billions of dollars in checking accounts throughout the United States. Much of this money must be derived from a variety of credit forms, such as mortgages, installment credit, and business credit. Thus, it is reasonable to assume that if the government could *manipulate credit conditions* in some way, it would have some control over the money supply. Easy credit conditions usually mean more loans; more loans, in turn, mean more dollars flowing through the economy.

Thus, if the government can control credit conditions, not only can it affect the money supply but also, perhaps more importantly, it can influence the total amount of spending. This means that whoever is in charge of the money supply (through credit manipulation) can have as much power over the economic system as those who control the federal budget. We already know that the President and Congress regulate the budget, but who is responsible for regulating credit conditions and the money supply?

The Federal Reserve System

The money supply is determined and regulated in large part by our central banking system, the **Federal Reserve System** (often simply called "the Fed"). In fact, if we were to pinpoint where major decisions are made on money matters, we would zero in on the seven-person Board of Governors of the Federal Reserve System in Washington, D.C. From there, we would move down to the 12 regional Federal Reserve Banks situated in major cities around the country. Take a moment to look at a $1 bill and see from which Federal Reserve Bank it was issued. (The source is written around the large letter to the left of Washington's face.) Your dollar was probably issued by a Federal Reserve Bank nearby. Three bills randomly selected from my wallet came from Minneapolis (I), St. Louis (H), and Chicago (G).

Monetary control then flows from the 12 regional Federal Reserve Banks down to the commercial banks that "belong" to the Federal Reserve System. These commercial banks, often called **member banks,** hold stock in the Federal Reserve System and are required to follow certain policies established

by the Fed. Perhaps you know of a "First National" bank in your area; you can be sure that it is one of these member banks.

Not all banks belong to the Fed, however. Only about one-third of all commercial banks are members of the system. Before 1980, this distinction was fairly important because member banks had to meet stiffer requirements that tied up money that could otherwise be earning interest. Thus, it was not surprising to see a sizable number of national banks defect from Fed membership and become state banks, so that they could, in effect, utilize more of their funds.

In this pre-1980 period, even greater distinctions were made between regular banks and other so-called "thrift" institutions, such as savings and loans (S&Ls) and credit unions. For example, an S&L was allowed to offer savers slightly higher interest returns, with the expectation that they would specialize in meeting their community's housing loan needs. They were not, however, allowed to compete with banks on several fronts, including the issuing of checking accounts. Rigid compartmentalization was the rule of the day.

All this changed during the deregulation of the Carter and Reagan administrations. Specifically, the Depository Institutions Deregulation and Monetary Control Act of 1980 phased in new policies that effectively blurred many previous distinctions. Today, as you probably know, all depository institutions can offer their customers some type of checking (demand-deposit) account. In return for this privilege, these institutions adhere to many of the same rules that member banks follow, including the same reserve requirements; this, in turn, helps the Federal Reserve to maintain its broad-based control of the credit system. Putting it another way, the Deregulation Act of 1980 created a competitive "free-for-all" that essentially made all financial institutions rivals for the same business. How then do these banks and thrift institutions make their profits?

The profit philosophy is actually quite simple: "Borrow money cheap; lend it dear." The difference between the rate of interest paid out for saving, checking, and other depositor accounts and the rate of interest charged for mortgage, installment, and business loans is the primary source of industry profits. Thus, the major responsibility of commercial banks and thrift institutions is to take in the deposits from those who want to save and

to lend out that money to those who want to borrow. These institutions are what economists call **financial intermediaries**—the middle operators (and profiteers) between savers and investors.

If commercial banks and thrift institutions hold deposits and make loans, then what do regional Federal Reserve Banks do? Each regional bank is a kind of "banker's bank"; it also holds deposits and makes loans. The deposits are called **reserves** (hence, "Federal Reserve"), and the loans are called **discounts.** The regional reserve banks also function as clearinghouses for the millions and millions of checks sent around the country, and they supervise the member banks in their region. Finally, the 12 regional Federal Reserve Banks supply their districts with Federal Reserve Notes (the commonly used paper currency in our wallets).

However, the real power within the Federal Reserve System—the power to influence credit and spending and, ultimately, unemployment and inflation—rests with the Board of Governors and its various committees. How does the Board influence the money supply, and what mysterious tools does this small band of government bankers have at its command?

We learned earlier in this chapter that *the key to influencing the money supply is the control of credit.* Therefore, when the Fed makes it difficult for the commercial banking system to give out loans, the growth of the money supply should slow down. When loans are easy to obtain, the money supply should grow at a faster rate. But how can the loan decisions of individual financial officers throughout the country be regulated? To see how this is done, we must return to the concept of reserves.

Every bank and every other depository institution must set aside a certain percentage of its deposits in the form of reserves. For example, Federal Reserve guidelines might say that your local bank must set aside at least 12 percent of its total demand deposits (assets in checking accounts). We call this percentage the **reserve ratio.** Let's look at an example to see how this works.

Suppose that you live in Central City, New York, and that your newly established commercial bank has an initial deposit of $1000 in demand deposits. If the reserve ratio for checking accounts is 12 percent, then your bank must set aside a reserve of $120. However, the directors of the Central City First National Bank might decide that if they want to make any loans,

they should maintain some *excess reserves* above and beyond the required $120. Do you see why?

If any customers borrow money from the Central City bank and then cash their loan checks at another bank, Central City would lose those reserves and the other bank would gain them. Assume that our bank (with only $120 in reserves) just loans Sarah Smith $500, which she immediately deposits in her checking account. If Sarah later decides to take the full $500 and spend it all out of state while vacationing in Florida, then the Central City bank won't have sufficient funds to transfer to the Florida bank. (Remember that all payments between banks involve a transfer of reserves.) Therefore, to *safely* loan Sarah the $500, Central City bank would be wise to have at least $500 in excess reserves to cover the loan.

In summary, a bank's capacity to lend out money depends primarily on the size of its excess reserves. When large amounts of excess reserves are generally distributed throughout the country, we usually find *easy* money conditions; if commercial banks around the country are holding few excess reserves, we can expect *tight* money conditions. We should also note that when "new" dollars are loaned out (and "new" money is created), other banks receive this additional money. These banks can, in turn, use this money (after holding the required fraction of reserves) to further expand the money supply—in a way similar to the multiplier effect we examined in Chapter 8. Naturally, this monetary multiplier works in reverse if there is a net reduction in commercial loans.

Monetary Policy

The obvious question we must now ask is, "Since the key to controlling credit conditions and the money supply lies in controlling excess reserves, exactly how does the Federal Reserve influence the amount of excess reserves in the banking system?"

One way is simply *by raising or lowering the reserve ratio.* To use an exaggerated example, what would happen if the Fed increased the reserve ratio from 12 to 20 percent? The excess reserves of all U.S. commercial lending institutions would suddenly be diminished by billions and billions of dollars, and credit would become tight. On the other hand, if the Fed lowered the reserve ratio requirement, then the excess reserves of all depository institutions would automatically expand and credit

conditions would ease up. Power over the reserve ratio therefore translates into power over the money supply.

Another monetary tool the Fed uses to manipulate excess reserves is the buying and selling of government securities, called **open-market operations.** U.S. commercial banks presently hold billions of dollars worth of government obligations in the form of bonds, notes, and other securities. Banks purchase these securities because the government frequently offers them at attractive interest rates. To *reduce* excess reserves, all the Fed has to do is *sell* more securities to the member banks. This reduction comes about because banks pay for the securities by *taking the money out of their reserve accounts.* The immediate lowering of these reserves thus reduces the potential loaning capacity of the commercial banks, tightening money conditions throughout the economy.

If, instead, the Fed decides to *buy* securities from commercial banks, then the process is reversed. The money from the Fed will enlarge the reserve accounts of the banks, and more "potential" money will be available for customer loans. Buying back securities from the banks may therefore result in more loans, an increase in the money supply, and (it is hoped) more spending.

The specific group that decides whether to buy or sell government securities to member banks is the **Open Market Committee.** It should be noted that open-market operations are used more frequently than the manipulation of the reserve ratio is adjusted. When the Fed changes the reserve ratio—(particularly upward), it causes great hardships for banks that are "all loaned up," or have already lent out their maximum amounts of money. The flexibility and ease of the open-market operation make it the number one monetary tool used by the Federal Reserve.

Our last major monetary control is called the **discount rate.** Remember from our earlier discussion that one of the Fed's services to member banks and other depository institutions is a borrowing privilege. These loans are discounts, and the interest rate on these loans is the discount rate. By *raising* the discount rate, the Fed discourages borrowing. Banks that reduce the amount of money they borrow from the Fed will have less money to lend out to their own customers.

loans, etc. Lowering the discount rate can also *indirectly* influence other interest rates throughout the economy. For example, when the discount rate is lowered, most banks are inclined to "return the favor" by lowering interest rates on their own loans.

These three controls—the reserve ratio, open-market operations, and the discount rate—are the monetary tools that the Fed uses not only to regulate the money supply but also to help stabilize the economy.

Now let's summarize what we learned about monetary policies and apply that to what we already know about supply and demand. First, we consider inflation. If our country were facing severe inflation, the Fed would probably do one, two, or all of the following:

1. Raise the reserve ratio.
2. Raise the discount rate.
3. Sell government securities.

This monetary policy leads to:

Less excess reserves.
↓
Less commercial loans.
↓
Less money.
↓
Higher interest rates.

If money becomes very scarce, overall interest rates can go "sky high," as they did in 1970, 1974, and the early 1980s. The combined impact of high interest rates and tight money conditions usually discourages business investment spending and dampens consumer demand for interest-sensitive durables, such as automobiles and housing. This sequence of events ultimately leads to a reduction in investment spending and is the basis of the Fed's anti-inflationary monetary policies.

We have come full circle. Our economic controls for influencing spending are now complete.

Recall our graphs of total supply and total demand in

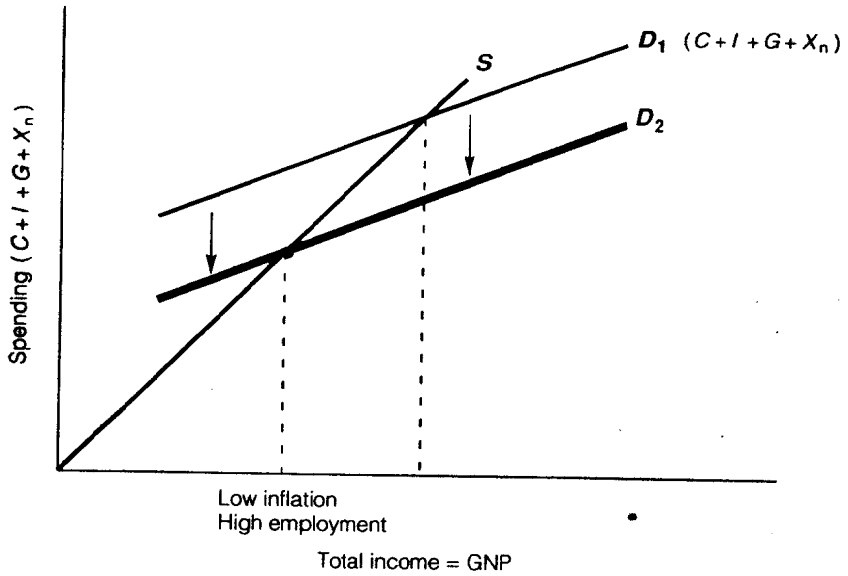


FIGURE 9-1 If the economy experiences high inflation due to excess demand (D_1), then the Federal Reserve can undertake *anti-inflationary* monetary policies to lower demand to a noninflationary level of GNP (D_2).

demand curve may rise or fall, depending on whether we are facing inflation or recession.

Now we know that monetary policies also have a profound impact on a third important component of total spending—investment spending *I*. Monetary policies that combat inflation will therefore affect our graph of total supply and total demand as shown in Figure 9-1.

In a recession, the appropriate monetary policies for easing credit are:

1. Lower the reserve ratio.
2. Lower the discount rate.
3. Buy government securities.

In theory, then, excess reserves will increase first. Then, as the money supply grows, credit will be easier to obtain. More money in the system will eventually drive interest rates down. Easier money and low interest rates should encourage investment spending, which, in turn, will help to lift up the total demand curve (see Figure 9-2).

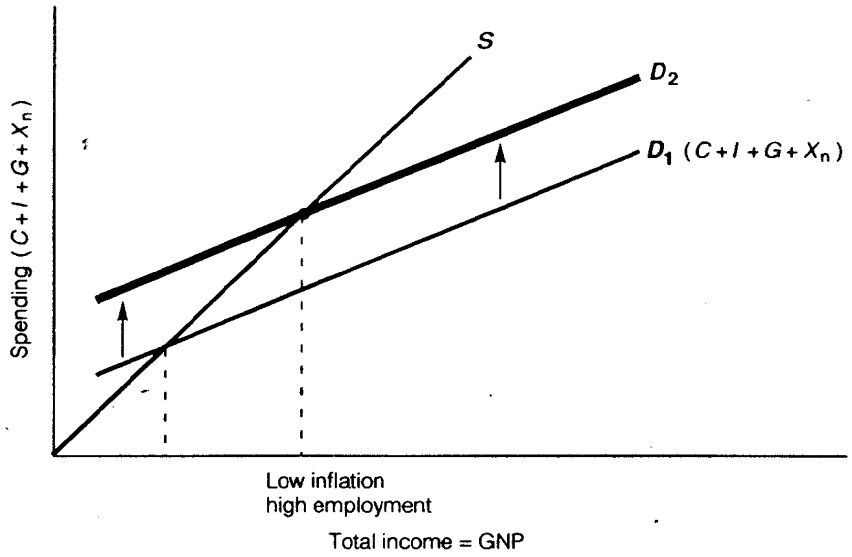


FIGURE 9-2 If the economy is sluggish as a result of too little demand (D_1), then the Federal Reserve can undertake *anti-recessionary* monetary policies to stimulate investment spending *I*, thereby expanding aggregate demand to D_2.

How closely do these theories match reality? Economists are quick to point out that monetary policies are more effective in combating inflation than recession. During an inflationary period, the monetary screw can be tightened until money and credit are actually squeezed off. In 1970 and again in 1981, we experienced some of the harmful side effects of *ultratight* money—for example, a "depression" in the housing industry when mortgage rates were driven to unreasonable levels.

On the other hand, lowering interest rates and making credit easily available does not force businesses to increase investments. During the Great Depression, for example, interest rates were very low, but the other negative factors—the stock-market slump, low incomes, loss of confidence, and general pessimism—far outweighed the expansionary effects of easy money.

The Federal Reserve is currently in a "Keynesian mode," as we described earlier. The Board of Governors is, in effect making a *conscious* effort to adjust credit, the money supply, and interest rates (which eventually impact on business investments and

consumption spending) to forestall current or projected economic problems. This interventionist approach has also been referred to as **discretionary monetary policy.**

Paul Hellman, writing for *The Wall Street Journal's* editorial page (January 31, 1990), has some fun with Fed Chairman Alan Greenspan's incessant tinkering with the economy—adjusting this, adjusting that—as if he (or his Fed Board) were playing the metaphoric role of "auto mechanic":

> The Fed sometimes must roll up its sleeves and adjust the economic machinery. The Fed spends a lot of time either tightening things or loosening things, or debating about whether to tighten or loosen. Imagine a customer taking his car into Greenspan's Garage.
>
> Normally calm, Skeezik Greenspan took one look at the car and started to sweat. This would be hard to fix—it was an economy car: "What's the problem?" asked Greenspan.
>
> "It's been running beautifully for over six years now," said the customer. "But recently it's been acting sluggish."
>
> "These cars are tricky," said Greenspan.
>
> "We can always loosen a few screws, as long as you don't mind the side effects."
>
> "What side effects?" asked the customer.
>
> "Nothing at first," said Greenspan. "We won't even know if the repairs have worked for at least a year. After that, either everything will be fine, or your car will accelerate wildly and go totally out of control."
>
> "Just as long as it doesn't stall," said the customer. "I hate that."

All humor aside, this description does tend to approximate the school of thought that our economy needs an activist Federal Reserve. It should be noted, however, that there is a group of economists who feel that this tinkering (sometimes called "fine tuning") creates more problems that it solves. They call themselves **monetarists** and include, among others, Nobel Prize winner Milton Friedman and Allan Meltzer, who is affiliated with Carnegie Mellon University. Let's take a brief look at some of their arguments and suggestions.

Monetarism

Inherent in the **monetarist philosophy** is a distinct distrust of government in general and a specific distrust of the government's

ability to know enough about current and future economic conditions to *time* its interventionist policies accurately to stabilize the business cycle. Friedman, for one, has looked at the historical data of monetary growth versus economic performance and concluded that the Fed's tendency toward frequent intervention has actually been counterproductive: Fed policies—undertaken in good faith—have produced even *greater,* not lesser, swings in the business cycle, according to Friedman.

For monetarists, money indeed "matters"; it is the chief determinant of current macroeconomic problems. On the other hand, money has the potential to contribute to macroeconomic solutions. The way to achieve economic stability, as the monetarist sees it, is by a simple **monetary rule:** increase the money supply at a relatively constant rate month after month, year after year.

Friedman advocates an increase of 3–5 percent per year—an expansion in the money supply commensurate with the potential long-run growth rate of overall economic activity. Surges in money growth will, according to Friedman, eventually result in inflation; discretionary cuts, after a time-lag, will move the economy toward recession. Given the monetarist's strict 3–5 percent rule, we would no longer use a "heroic" metaphor for the role of the Federal Reserve Chairman (even Hellman's "auto mechanic" would be inappropriate). According to the monetarist view, stable money growth creates the optimal conditions for long-run economic success—like a robotic dispenser feeding monetary nourishment on a predictable and steady basis to a healthy, growing economy.

In conclusion, whatever role the Fed takes or the dilemmas it faces, today or in the future, it will nonetheless continue to be a critical economic institution—hopefully one that helps to maintain a stable economy, a healthy financial system, and most importantly, a trustworthy monetary base from which we can all go about our private economic affairs with a feeling of confidence.

Questions for Thought and Discussion

1. Should a tight monetary policy or an easy monetary policy be used during stagflation?